Clinopyroxene-Liquid Thermobarometers

Reference	Name in ThermoBar	T-dependent?	P-dependent?	H₂O-dependent?			
Clinopyroxene-Liquid Barometry. Function "calculate_cpx_liq_press"							
Putirka (1996)	P_Put1996_eqP1	✓		X			
	P_Put1996_eqP2	✓		X			
Putirka (2003)	P_Put2003	✓		X			
Putirka (2008)	P_Put2008_eq30	✓		✓			
	P_Put2008_eq31	✓		✓			
	P_Put2008_eq32c	✓		✓			
Masotta et al. (2013)	P_Mas2013_eqPalk1	✓		X			
recalibration of Putirka	P_Mas2013_eqPalk2	✓		X			
eqs. for alkali systems	P_Mas2013_eqalk32c	✓		✓			
Masotta et al. (2013)	P_Mas2013_Palk2012	X		✓			
Neave & Putirka (2017)	P_Neave2017	✓		X			
Petrelli et al. (2021)	P_ Petrelli2021_Cpx_Liq	X		✓			
Jorgenson et al. (2021)	PlaceHolder						
Clinopyroxene-Liquid Thermometry. Function "calculate_cpx_liq_temp"							
Putirka (1996)	T_Put1996_eqT1		X	X			
	T_Put1996_eqT2		✓	X			
Putirka (1999)	T_Put1999		✓	X			
Putirka (2003)	T_Put2003		✓	X			
Putirka (2008)	T_Put2008_eq33		✓	✓			
Masotta et al. (2013)	T_Mas2013_eqTalk1		X	X			
Recalibration of Putirka	T_Mas2013_eqTalk2		✓	X			
eqs. for alkali systems	T_Mas2013_eqalk33		✓	✓			
Masotta et al. (2013)	T_Mas2013_Talk2012		X	✓			
Brugman & Till (2019)	T_Brug2019		X	X			
Petrelli et al. (2021)	T_ Petrelli2021_Cpx_Liq		X	✓			
Jorgenson et al. (2021)	PlaceHolder						
	Other F	unctions		•			

Other Functions

calculate_cpx_liq_press_temp(): Iteratively solves P and T for cpx-liq pairs using an equation for P and an equation for T
calculate_cpx_liq_press_temp_matching(): Calculates P and T for all possible cpx-liquid pairs (with user-selected options
for equilibrium criteria)

calculate_cpx_rhodes_diagram_lines(): Calculates equilibrium lines for a range of melt Mg#s using a variety of user-selected options for equilibrium models.

Clinopyroxene-only Thermobarometers

Reference	Name in ThermoBar	T-dependent?	P-dependent?	H ₂ O-dependent?		
Clinopyroxene-only Barometry. Function "calculate_cpx_only_press"						
Putirka (2008)	P_Put2008_eq32a	✓		X		
	P_Put2008_eq32b	✓		✓		
Petrelli et al. (2021)*	P_Petrelli2021_Cpx_only	Χ		Χ		
	P_Petrelli2021_Cpx_only_withH2O*	Χ	_	✓		
Wang et al. (2021)	P_Wang2021_eq1	Χ	_	Χ		
	P_Wang2021_eq3	Χ		X		
Jorgenson et al. (2021)	PlaceHolder					